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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/556,671	04/24/2000	Michael Stephen Austin	99-0138	7622

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EXAMINER

BAXTER, JESSICA R

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/556,671

Applicant(s)

AUSTIN, MICHAEL STEPHEN

Examiner

Jessica R Baxter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-24, 27-37, 39 and 40 is/are pending in the application.
- 4a) Of the above claim(s) 39 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-24 and 27-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 8, 9, 11-16, 21, 23, 24, 27-32 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,994,071 to MacGregor as evidenced by U.S. Patent No. 4,733,665 to Palmaz.

MacGregor discloses a prosthesis comprising a hollow tubular body comprising at least one segment of curvature (see FIGS 2A-3D and Column 2 lines 32-49). MacGregor discloses that the body segment is curved in at least one plane (see FIGS 2A-3D), that the hollow tubular body comprises undulating wire (see FIG. 1 loops 12) formed from a shape memory alloy, a super elastic alloy, a polymer, or nitinol (see Column 5 lines 39-51), and that at least one branch of the prosthesis extends away from the body of the prosthesis (see FIG. 1 lattices 20 and 22).

Regarding the limitation “wherein the wire and its turns are distributed substantially equally along the length of the prosthesis.”, MacGregor discloses that other stent patterns may be used to make the bifurcated stent (Column 4 lines 19-35), particularly Palmaz ‘665. The stent pattern disclosed in this patent shows that the turns of the wire are distributed substantially equally along the length of the stent (FIG. 1A).

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3. Claims 1, 2, 4, 8, 9, 18, 19, 21-24, 34, 35, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,653,743 to Martin.

Martin discloses a prosthesis comprising a hollow tubular body with at least one segment of curvature (see FIG. 5). Martin discloses that the body comprises wire (see Column 2 lines 49-60) with turns distributed substantially equally along the length. Martin discloses that the body segment is curved in at least one plane (see FIG. 5 prosthesis 1), that the body has at least two segments of curvature located in successive progression and are curved within the same plane of curvature (see FIG. 5 prosthesis 1), that there is at least one taper along the length of the body (see FIG. 1 prosthesis 1), that there is at least one aperture on the body between the proximal end and the distal end (see FIG. 1 opening 7), that at least one branch of the prosthesis extends away from the body of the prosthesis (see FIG. 5 graft 18), and that at least a portion of the prosthesis is covered with a graft covering (see Column 2 lines 49-63).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 5, 6, 7, 17 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin '743 in view of WO 95/09585 to Caro.

Martin discloses the claimed invention except for the three-dimensional shape of the prosthesis. Caro teaches that a prosthesis is made to have curvature in three dimensions

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since the body vessels are curved in more than two dimensions (Page 3 line 26-Page 4 line 27) and the three-dimensional prostheses improves swirl flow and blood velocity. It would have been obvious to one having ordinary skill in the art to provide the device of Martin with the three-dimensional curvature of Caro in order to influence local blood velocity fields and prevent/treat vascular disease with improved swirl flow and blood velocity.

6. Claims 20 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin '743 in view of U.S. Patent No. 5,695,517 to Marin et al.

Martin discloses the claimed invention except for having a non-circular cross-section along the length of the body. Marin teaches that a non-circular cross-section is provided in a prosthesis in order to expand two stents simultaneously side by side for a bifurcated stent (Column 3 lines 24-35 and Column 4 lines 2-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Martin with the non-circular shape of Marin in order to expand the two side-by-side stents simultaneously.

Response to Arguments

7. Applicant's arguments filed July 30, 2004 have been fully considered but they are not persuasive.

8. Applicant argues that MacGregor '071 does not have turns that are distributed substantially equally along the length. MacGregor does disclose that different stent patterns can be used. Of those specifically disclosed, (5,019,090 to Pinchuk and 4,733,665 to Palmaz), both disclose stent patterns that have turns distributed substantially equally along the length. In addition, MacGregor also appears to have turns distributed substantially along the length. The small discontinuity at the bifurcation point still allows the wire's turns to be distributed *substantially* equally along the length.

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9. Applicant argues that Martin '743 fails to disclose turns that are distributed substantially equally along the length. Applicant points to Figure 1, citing a gradient of wire crossings. The turns of the wire appear to be distributed over the length of the stent at a *substantially* equal distribution. The separation of the wire crossings does not change the distribution of the turns *substantially*.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica R Baxter whose telephone number is 703-305-4069. The examiner can normally be reached on M-F 8:30AM - 5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T Nguyen can be reached on 703-308-2154. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jessica R Baxter
Examiner
Art Unit 3731


jrb


ANH TUAN T. NGUYEN
PRIMARY EXAMINER

10/18/04